

Product datasheet for **RG239946**

TIE2 (TEK) (NM_001290077) Human Tagged ORF Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | TIE2 (TEK) (NM_001290077) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | TIE2 |
| Synonyms: | CD202B; GLC3E; TIE-2; TIE2; VMCM; VMCM1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |
| ORF Nucleotide Sequence: | >RG239946 representing NM_001290077. Blue=ORF Red=Cloning site Green=Tag(s) |

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGGACTCTT TAGCCAGCTTAGTCTCTGTGGAGTCAGCTTGCTCCTTTCTGGAAGTGTGGAAGGTGCC
ATGGACTTGATCTTGATCAATCCCTACCTCTTGATCTGATGCTGAAACATCTCTCACCTGCATTGCC
TCTGGGTGGCGCCCATGAGCCCATCACCATAGGAAGGGACTTTGAAGCCTTAATGAACCAGCACCAG
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GCTAGTAAGATCAATGGTGCTTATTTCTGTGAAGGGCAGTTCGAGGAGAGGCAATCAGGATACGAACC
ATGAAGATGCGTCAACAAGCTTCCTTCTACCAGCTACTTAACTATGACTGTGGACAAGGGAGATAAC
GTGAACATATCTTTCAAAAAGGTATTGATTAAGAAGAAGATGCAGTGATTTACAAAAATGGTTCCTTC
ATCCATTCAGTGCCCGGCATGAAGTACCTGATATTCTAGAAGTACACCTGCCTCATGCTCAGCCCCAG
GATGCTGGAGTGTACTCGCCAGGTATATAGGAGGAAACCTCTTACCTCGGCCTTACCAGGCTGATA
GTCCGGAGATGTGAAGCCGAGAAGTGGGACCTGAATGCAACCATCTCTGTACTGCTTGTATGAACAAT
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TTAATCCCATTTGCAAAGCTTCTGGCTGGCCGCTACCTACTAATGAAGAAATGACCCCTGGTGAAGCCG
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AATCTCCTGCCTAAAAGTCAGACCACTCTAAATTTGACCTGGCAACCAATATTTCCAAGCTCGGAAGAT
 GACTTTTATGTTGAAGTGGAGAGAAGGTCTGTGCAAAAAAGTGATCAGCAGAATATTAAGTTCCAGGC
 AACTTGACTTCGGTGTACTTAACTTACATCCCAGGGAGCAGTACGTGGTCCGAGCTAGAGTCAAC
 ACCAAGGCCAGGGGGAATGGAGTGAAGATCTCACTGCTTGACCCCTTAGTGACATTCTTCTCCTCAA
 CCAGAAAAATCAAGATTTCCAACATTACACACTCCTCAGCTGTGATTTCTTGGACAATATTGGATGGC
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 CGTGTGCTGGAGACGGACCCAGCATTGCCATTGCCAATAGCACCGCGTCCACACTGTCTCCAGCAG
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 AGCTTAGGAGGCACCCCTACTGCGGGATGACTGTGCAGAACTACGAGAAGCTGCCCCAGGGCTAC
 AGACTGGAGAAGCCCTGAACTGTGATGATGAGGTGTATGATCTAATGAGACAATGCTGGCGGGGAAG
 CCTTATGAGAGGCCATCATTGCCCCAGATATTGGTGTCTTAAACAGAATGTTAGAGGAGCGAAAGACC
 TACGTGAATACCACGCTTATGAGAAGTTACTTATGCAGGAATTGACTGTTCTGCTGAAGAAGCGGCC
ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAAAC

Protein Sequence:

>Peptide sequence encoded by RG239946
 Blue=ORF Red=Cloning site Green=Tag(s)

MDSLASLVLCVSLLLSGTVEGAMDILINSLPLVSDAETSLTCIASGWRPHEPITIGRDFEALMNQHQ
 DPLEVTDVTREWAKKVVWKREKASKINGAYFCEGRVGEAIRIRTMKMRQQASFLPATLMTVDKGDN
 VNISFKKVLIKEEDAVIYKNGSF IHSVPRHEVPDILEVHLPHAQPDAGVYSARYIGGNLFTSAFTRLI
 VRRCEAQKWGPECNHLCTACMNGVCHEDTGEICPPGFMGRTEKACELHTFGRTCKERCSDQEGCKS
 YVFCPLPDPYGCSCATGWKGLQCNEGIPRMPKIVDLPDHIEVNSGKFNPICKASGWPLPTNEEMTLVKP
 DGTVLHPKDFNHTDHF SVAIFTIHRILPPDSGVWVCSVNTVAGMVEKPFNIVKVLKPLNAPNVIDTG
 HNFVAVINISSEPYFGDGP IKS KLLYKPVNHYEAWQHIQVTNEIVTLNYLEPRTEYELCVQLVRRGEGG
 EGHGPGVRRFTTASIGLPPRGLNLLPKSQTTLNL TWQPIFPSEDDFYVEVERRSVQKSDQQNIKVP
 NLTSVLLNNLHPREQYVVRARVNTKAQGEWSEDLTAWTLDILPPQENIKISNIHSSAVISWTILDG
 YSISSITIRYKVQGNEDQHVVDVVIKKNATITQYQLKGLEPETAYQVDIFAENNIGSSNPAF SHELVTLP
 ESQAPADLGGGKMLLIAILGSAGMTCLTVLLAFLIILQLKRANVQRMAQAFQNVREEPAVQFNSGTLA
 LNRKVKNNPDPTIYPVLDWNDIKFQDVIGENFGQVLKARIKKDGLRMDAAIKRMKEYASKDDHRDFAG
 ELEVLCCKLGHHPNIINLLGACEHRGYLYLAIEYAPHGNLLDFLRKRSLVLETPAFAIANSTLSSQQ
 LLHFAADVARGMDYLSQKQFIHRDLAARNILVGENYVAKIADFGLSRGQEVVYKTMGRLPVRWMAIES
 LNYSVYTTNSDVWSYGVLLWEIVSLGGTPYCGMTCALYEKLPQGYRLEKPLNCDDEVYDLMRQCWREK
 PYERVSFAQILVSLNRMLEERKTYVNTTLYEKFTYAGIDCSAEEAA

TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites:

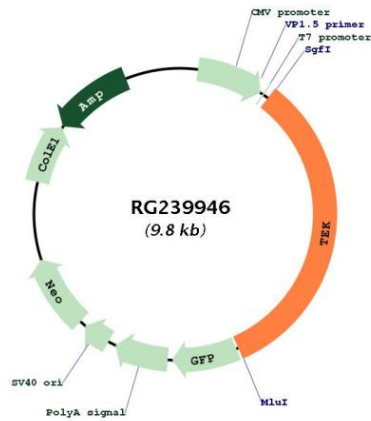
Sgfl-Mlul

Cloning Scheme:


| | |
|--------------------------|--|
| ACCN: | NM_001290077 |
| ORF Size: | 3243 bp |
| OTI Disclaimer: | The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info |
| OTI Annotation: | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene. |
| Components: | The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water). |
| RefSeq: | NM_001290077.1 , NP_001277006.1 |
| RefSeq Size: | 4658 bp |
| RefSeq ORF: | 3246 bp |
| Locus ID: | 7010 |
| UniProt ID: | Q02763 |
| Cytogenetics: | 9p21.2 |
| Protein Families: | Druggable Genome, ES Cell Differentiation/IPS, Protein Kinase, Transmembrane |
| MW: | 121.5 kDa |

Gene Summary:

This gene encodes a receptor that belongs to the protein tyrosine kinase Tie2 family. The encoded protein possesses a unique extracellular region that contains two immunoglobulin-like domains, three epidermal growth factor (EGF)-like domains and three fibronectin type III repeats. The ligand angiopoietin-1 binds to this receptor and mediates a signaling pathway that functions in embryonic vascular development. Mutations in this gene are associated with inherited venous malformations of the skin and mucous membranes. Alternative splicing results in multiple transcript variants. Additional alternatively spliced transcript variants of this gene have been described, but their full-length nature is not known. [provided by RefSeq, Feb 2014]

Product images:


Circular map for RG239946